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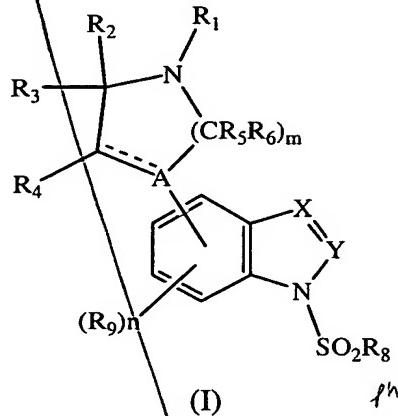
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This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A compound of formula I



wherein

A is C, CR₁₀ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, C₁-C₆alkenyl, C₁-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or C₁-C₆alkoxy group each optionally substituted;

R₈ is an C₁-C₆alkyl, aryl or heteroaryl group each optionally substituted;

R₉ is H, halogen or an C₁-C₆alkyl, C₁-C₆alkoxy, C₁-C₆alkenyl, aryl or heteroaryl group each optionally substituted;

R₁₀ is H, OH or an optionally substituted C₁-C₆alkoxy group;

m is an integer of 1, 2 or 3;

n is 0 or an integer of 1, 2 or 3; and

— represents a single bond or a double bond; or
a pharmaceutically acceptable salt thereof.

2. (Cancelled)

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3. (Original) The compound according to claim 1 wherein R₈ is an optionally substituted phenyl group.

A2

4. (Original) The compound according to claim 1 wherein R₂, R₃, R₄, R₅ and R₆ are H.

5. (Currently Amended) The compound according to claim 2 1 wherein R₁ is H or a C₁-C₆alkyl or cycloheteroalkyl group each optionally substituted.

6. (Original) The compound according to claim 5 selected from the group consisting of:

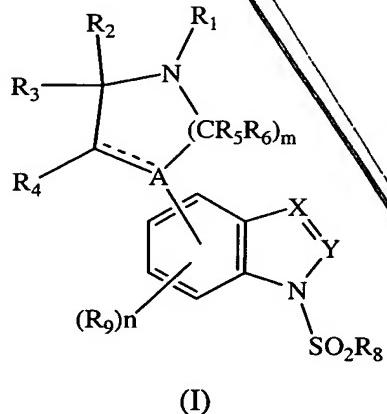
1-(phenylsulfonyl)-4-piperazin-1-yl-1H-indole;
1-[(2-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(3,4-dimethoxyphenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(5-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(4-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(5-bromothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(4,5-dichlorothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
methyl 4-[(4-piperazin-1-yl-1H-indol-1-yl)sulfonyl]phenyl ether;
4-piperazin-1-yl-1-{[4-(trifluoromethoxy)phenyl]sulfonyl}-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-(phenylsulfonyl)-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-[(2-bromophenyl)sulfonyl]-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-[(3,4-dimethoxyphenyl)sulfonyl]-1H-indole;
4-[4-(3-methoxybenzyl)piperazin-1-yl]-1-(phenylsulfonyl)-1H-indole;
1-(phenylsulfonyl)-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
1-(phenylsulfonyl)-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;
1-[(2-bromophenyl)sulfonyl]-4-[4-(3-methoxybenzyl)piperazin-1-yl]-1H-indole;
1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;
1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;
1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;

B1
cont

1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;
1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;
1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and
the pharmaceutically acceptable salts thereof.

A2

7. (Currently Amended) A method for the treatment of a disorder of the central nervous system related to or affected by the 5-HT₆ receptor wherein said disorder is selected from the group consisting essentially of: schizophrenia; depression; and a cognitive disorder in a patient in need thereof which comprises administering to said patient a therapeutically effective amount of a compound of formula I.



(I)

wherein

A is C, CR₄₋₉ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, C₁-C₆alkenyl,

C₁-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

B1
cont

R_2, R_3, R_4, R_5 and R_6 are each independently H, halogen, OH or an optionally substituted C_1 - C_6 alkyl group;

R_7 and R_{11} are each independently H, halogen or an C_1 - C_6 alkyl, aryl, heteroaryl or C_1 - C_6 alkoxy group each optionally substituted;

R_8 is an C_1 - C_6 alkyl, aryl or heteroaryl group each optionally substituted;

R_9 is H, halogen or an C_1 - C_6 alkyl, C_1 - C_6 alkoxy, C_1 - C_6 alkenyl, aryl or heteroaryl group each optionally substituted;

R_{10} is H, OH or an optionally substituted C_1 - C_6 alkoxy group;

m is an integer of 1, 2 or 3;

n is 0 or an integer of 1, 2 or 3; and

— represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

A2

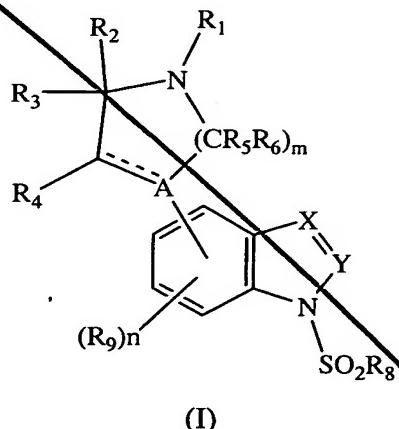
8. (Cancelled)

9. (Original) The method according to claim 7 wherein said disorder is schizophrenia or depression

10. (Currently Amended) The method according to claim 7 wherein said cognitive disorder is Alzheimer's disease or Parkinson's disease.

11. (Cancelled)

12. (Currently Amended) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a compound of formula I.



wherein

B1
cont

A is C, CR₁₀ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, C₁-C₆alkenyl, C₁-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or C₁-C₆alkoxy group each optionally substituted;

R₈ is an C₁-C₆alkyl, aryl or heteroaryl group each optionally substituted;

R₉ is H, halogen or an C₁-C₆alkyl, C₁-C₆alkoxy, C₁-C₆alkenyl, aryl or heteroaryl group each optionally substituted;

R₁₀ is H, OH or an optionally substituted C₁-C₆alkoxy group;

m is an integer of 1, 2 or 3;

n is 0 or an integer of 1, 2 or 3; and

— represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

A2
A 2

13. (Cancelled)

B1
cont

14. (Original) The composition according to claim 12 wherein R₈ is an optionally substituted phenyl group.

15. (Original) The composition according to claim 12 wherein R₂, R₃, R₄, R₅ and R₆ are H.

16. (Currently Amended) The composition according to claim 13 12 wherein R₁ is H or a C₁-C₆alkyl or cycloheteroalkyl group each optionally substituted.

17. (Original) The composition according to claim 16 having a compound of formula I selected from the group consisting of:

1-(phenylsulfonyl)-4-piperazin-1-yl-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

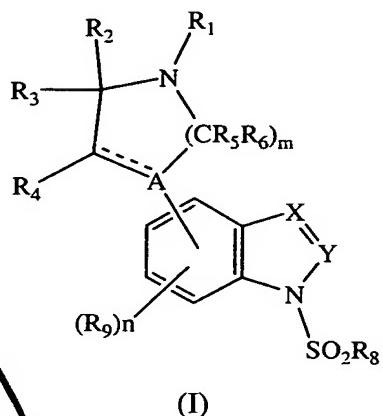
B1
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1-[(3,4-dimethoxyphenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(5-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(4-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(5-bromothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
1-[(4,5-dichlorothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
methyl 4-[(4-piperazin-1-yl-1H-indol-1-yl)sulfonyl]phenyl ether;
4-piperazin-1-yl-1-{[4-(trifluoromethoxy)phenyl]sulfonyl}-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-(phenylsulfonyl)-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-[(2-bromophenyl)sulfonyl]-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1H-indole;
4-(4-benzylpiperazin-1-yl)-1-[(3,4-dimethoxyphenyl)sulfonyl]-1H-indole;
4-[4-(3-methoxybenzyl)piperazin-1-yl]-1-(phenylsulfonyl)-1H-indole;
1-(phenylsulfonyl)-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
1-(phenylsulfonyl)-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;
1-[(2-bromophenyl)sulfonyl]-4-[4-(3-methoxybenzyl)piperazin-1-yl]-1H-indole;
1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;
1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;
1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;
1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;
1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;
1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and
the pharmaceutically acceptable salts thereof.

A2

18. (Currently Amended) A method for the preparation of a compound of formula I.

B¹
cont



A²
wherein

A is C, CR₁₀ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, C₁-C₆alkenyl, C₁-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or alkoxy group each optionally substituted;

R₈ is an C₁-C₆alkyl, aryl or heteroaryl group each optionally substituted;

R₉ is H, halogen or an C₁-C₆alkyl, C₁-C₆alkoxy, C₁-C₆alkenyl, aryl or heteroaryl group each optionally substituted;

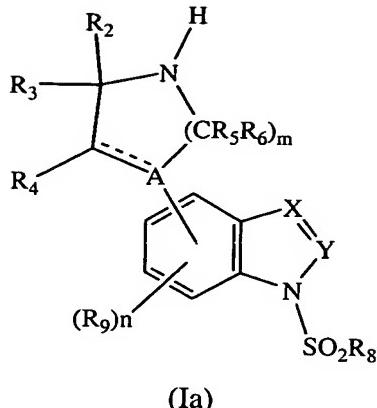
R₁₀ is H, OH or an optionally substituted C₁-C₆alkoxy group;

m is an integer of 1, 2 or 3;

n is 0 or an integer of 1, 2 or 3; and

— represents a single bond or a double bond

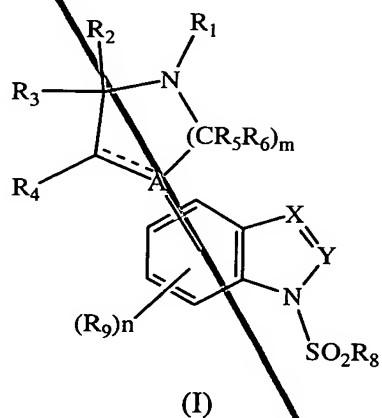
said method which comprises reacting a compound of formula Ia



wherein A, X, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉, m and n are as defined hereinabove for formula I with a compound R₁-Hal wherein R₁ is as defined hereinabove for formula I and Hal is Cl, Br or I.

A2

19. (New) A compound of formula I



wherein

A is N;

X is CR₁₁ or N;

Y is CR₇ or N with the provisos that when X is N, then Y must be CR₇ and at least one of X and Y must be N;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, C₁-C₆alkenyl, C₁-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or C₁-C₆alkoxy group each optionally substituted;

B1
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R_8 is an C_1 - C_6 alkyl, aryl or heteroaryl group each optionally substituted;

R_9 is H, halogen or an C_1 - C_6 alkyl, C_1 - C_6 alkoxy, C_1 - C_6 alkenyl, aryl or heteroaryl group each optionally substituted;

R_{10} is H, OH or an optionally substituted C_1 - C_6 alkoxy group;

m is an integer of 2;

n is 0 or an integer of 1, 2 or 3; and

--- represents a single bond or a double bond; or
a pharmaceutically acceptable salt thereof.

20. (New) The compound according to claim 19 wherein R_8 is an optionally substituted phenyl group.

21. (New) The compound according to claim 19 selected from the group consisting of:

1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;

1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;

1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;

1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;

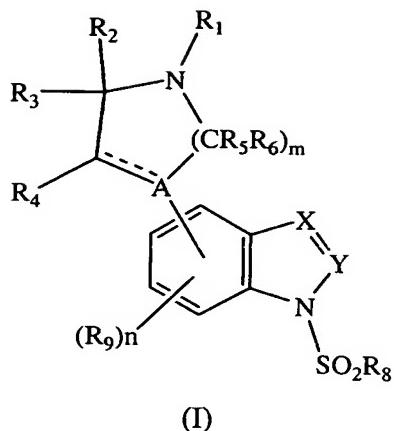
1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;

1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;

1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and

the pharmaceutically acceptable salts thereof.

22. (New) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a compound of formula I.



wherein

A is N;

X is CR₁₁ or N;

Y is CR₇ or N with the provisos that when X is N, then Y must be CR₇ and at least one of X and Y must be N;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, C₁-C₆alkenyl, C₁-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or C₁-C₆alkoxy group each optionally substituted;

R₈ is an C₁-C₆alkyl, aryl or heteroaryl group each optionally substituted;

R₉ is H, halogen or an C₁-C₆alkyl, C₁-C₆alkoxy, C₁-C₆alkenyl, aryl or heteroaryl group each optionally substituted;

R₁₀ is H, OH or an optionally substituted C₁-C₆alkoxy group;

m is an integer of 2;

n is O or an integer of 1, 2 or 3; and

— represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

23. (New) The composition according to claim 22 having a compound of formula I selected from the group consisting of:

1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;

1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;

1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;

1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;

B1 cont

1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
A2
methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;
1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;
1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;
1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and
the pharmaceutically acceptable salts thereof.